

Species Tag:	63003	Species Name:	HNO3-v9
Version:	1		Nitric acid,
Date:	Aug. 1990		$\nu_9 = 1$ state
Contributor:	E. A. Cohen		

Lines Listed:	32404	Q(300.0)=	55872.746
Freq. (GHz) <	1000	Q(225.0)=	45698.316
Max. J:	79	Q(150.0)=	19756.049
LOGSTR0=	-9.0	Q(75.00)=	6987.149
LOGSTR1=	-7.3	Q(37.50)=	2473.432
Isotope Corr.:	0.0	Q(18.75)=	876.597
Egy. (cm ⁻¹) >	458.2	Q(9.375)=	311.602
$\mu_a =$	1.986	A=	12999.00
$\mu_b =$	0.882	B=	12015.11
$\mu_c =$		C=	6255.243

These measurements have been fitted to data from F. C. De Lucia, private communication. The data are unpublished and have not been merged with the predicted spectrum. Because torsional splitting is observable for this state but is negligible for the other HNO₃ states included in the catalog, the partition function that is used to calculate intensities has been doubled. The dipole moment was assumed to be the same as for the ground state. The *b* dipole allows transitions between torsional states.